

What is claimed is:

1. A shielded electrical connector for mounting on a printed circuit board,
comprising:
a dielectric housing including a plurality of terminal-receiving cavities and a
plurality of board-engaging pads projecting from the bottom of the housing;
a plurality of terminals received in said cavities; and
portions of said housing between the terminals being plated with conductive metal
material to electrically shield the terminals from each other, the plating being continuous
onto said pads for connection to appropriate ground circuit means on the printed circuit
board.

2. The shielded electrical connector of claim 1 wherein said board-engaging
pads are located between said terminal-receiving cavities.

3. The shielded electrical connector of claim 1 wherein substantially the
entire interior of said terminal-receiving cavities are plated with the conductive metal
material, with the terminals being insulated therefrom.

4. The shielded electrical connector of claim 3 wherein said board-engaging
pads are located between said terminal-receiving cavities.

5. The shielded electrical connector of claim 1 wherein said housing is
molded of dielectric plastic material with the board-engaging pads being molded
integrally therewith.

6. The shielded electrical connector of claim 5 wherein substantially the
entire housing, including the board-engaging pads, is plated with the conductive metal
material, with the terminals being insulated therefrom.

2 7. The shielded electrical connector of claim 1 wherein said board-engaging pads are configured for surface engaging the printed circuit board.

2 8. The shielded electrical connector of claim 7 wherein said terminals include portions adapted for surface connection to appropriate circuit means on the printed circuit board.

2 9. The shielded electrical connector of claim 1 wherein said terminals comprise elements of terminal modules, with the terminals mounted in respective dielectric blocks received in the terminal-receiving cavities of the housing.

2 10. The shielded electrical connector of claim 9 wherein substantially the entire interior of said terminal-receiving cavities are plated with the conductive metal material.

2 11. The shielded electrical connector of claim 1 wherein said terminals are mounted in pairs with one pair in each terminal-receiving cavity, with portions of the housing between the pairs of terminals being plated with the conductive metal material.

12. A shielded electrical connector for mounting on a printed circuit board,
2 comprising:
a housing molded of dielectric plastic material and including a plurality of
4 terminal-receiving cavities and a plurality of integrally molded board-engaging pads
projecting from the bottom of the housing between the terminal-receiving cavities, the
6 pads being configured for surface engaging the printed circuit board;
a plurality of terminals received in said cavities, the terminals including portions
8 adapted for surface connection to appropriate signal circuit means on the printed circuit
board; and
10 portions of said housing between the terminals being plated with conductive metal
material to electrically shield the terminals from each other, the plating being continuous
12 onto said pads for connection to appropriate ground circuit means on the printed circuit
board.

13. The shielded electrical connector of claim 12 wherein substantially the
2 entire interior of said terminal-receiving cavities are plated with the conductive metal
material, with the terminals being insulated therefrom.

14. The shielded electrical connector of claim 13 wherein substantially the
2 entire housing, including the board-engaging pads, is plated with the conductive metal
material, with the terminals being insulated therefrom.

15. The shielded electrical connector of claim 12 wherein said terminals
2 comprise elements of terminal modules, with the terminals mounted in respective
dielectric blocks received in the terminal-receiving cavities of the housing.

16. The shielded electrical connector of claim 15 wherein substantially the
entire interior of said terminal-receiving cavities are plated with the conductive metal
material.

17. The shielded electrical connector of claim 12 wherein said terminals are
mounted in pairs with one pair in each terminal-receiving cavity, with portions of the
housing between the pairs of terminals being plated with the conductive metal material.

18. A shielded electrical connector, comprising:
a housing molded of dielectric plastic material and including a plurality of
terminal-receiving cavities and a plurality of integrally molded board-engaging pads
projecting from the bottom of the housing between the cavities;
a plurality of terminal modules received in said cavities, each module including at
least one terminal mounted in a dielectric block received in a respective one of the
terminal-receiving cavities of the housing; and
portions of said housing between the terminal modules being plated with
conductive metal material to electrically shield the terminals from each other, the plating
being continuous onto said pads for connection to appropriate ground circuit means on
the printed circuit board.

19. The shielded electrical connector of claim 18 wherein substantially the
entire interior of said terminal-receiving cavities are plated with the conductive metal
material.

20. The shielded electrical connector of claim 19 wherein substantially the
entire housing, including the board-engaging pads, is plated with the conductive metal
material.

21. The shielded electrical connector of claim 18 wherein each terminal
2 module includes a differential pair of terminals, with the respective dielectric block being
overmolded about the pair of terminals.

22. A shielded electrical connector assembly, comprising:
2 a first shielded electrical connector including
a first dielectric housing having a plurality of terminal-receiving cavities,
4 a plurality of first terminals received in said cavities, and
portions of said first housing between the terminals being plated with conductive
6 metal material to electrically shield the terminals from each other;
a second shielded electrical connector including
8 a second dielectric housing having a plurality of terminal-receiving cavities,
a plurality of second terminals received in said cavities and mateable with said
10 first terminals, and
portions of said second housing between the second terminals being plated with
12 conductive metal material to electrically shield the terminals from each other; and
complementary interengaging portions between said first and second housings of
14 the first and second connectors, respectively, with the metal plating on the two housings
being continuous onto the interengaging portions to conductively common the shielding
16 between both the first and second connectors.

23. The shielded electrical connector assembly of claim 22 wherein said
2 complementary interengaging portions between the first and second housings comprise a
tongue-and-groove structure.

24. The shielded electrical connector assembly of claim 23 wherein said
2 complementary interengaging portions between the first and second housings comprise a
network of ribs on one of the housings interengaging within grooves in the other of the
4 housings.

25. The shielded electrical connector assembly of claim 24 wherein said
2 interengaging ribs and grooves extend between the respective terminals of the two
connectors.

26. The shielded electrical connector assembly of claim 22 wherein
2 substantially the entire interior of the terminal-receiving cavities in the dielectric housing
of at least one of said connectors are plated with the conductive metal material, with the
4 respective terminals being insulated therefrom.

27. The shielded electrical connector assembly of claim 26 wherein said
2 board-engaging pads on the respective dielectric housing of at least one of said
connectors are located between the respective terminal-receiving cavities of that
4 connector.

28. The shielded electrical connector assembly of claim 22 wherein the
2 dielectric housing of at least one of the connectors is molded of dielectric plastic material
with the respective board-engaging pads of that housing being molded integrally
4 therewith.

29. The shielded electrical connector assembly of claim 28 wherein
2 substantially the entire dielectric housing of at least one of the connectors, including the
respective board-engaging pads thereof, is plated with the conductive metal material, with
4 the respective terminals being insulated therefrom.

2 30. The shielded electrical connector assembly of claim 22 wherein the
dielectric housing of at least one of said connectors includes a plurality of board-engaging
pads projecting from the bottom of the housing, with the plating of conductive metal
4 material being continuous onto said pads for connection to appropriate ground circuit
means on an appropriate printed circuit board.

2 31. The shielded electrical connector assembly of claim 30 wherein said
board-engaging pads are configured for surface engaging the printed circuit board.

2 32. The shielded electrical connector assembly of claim 31 wherein the
terminals of said at least one connector include portions adapted for surface connection to
appropriate circuit means on the printed circuit board.

2 33. The shielded electrical connector assembly of claim 22 wherein the
terminals of at least one of said connectors comprise elements of terminal modules, with
those terminals mounted in respective dielectric bodies received in the terminal-receiving
4 cavities of the housing of the at least one connector.

2 34. The shielded electrical connector assembly of claim 33 wherein
substantially the entire interior of the terminal-receiving cavities in the housing of said at
least one connector are plated with the conductive metal material.

2 35. The shielded electrical connector assembly of claim 22 wherein the
terminals of at least one of said connectors are mounted in pairs with one pair in each
terminal-receiving cavity of the housing of the at least one connector, and with portions
4 of the housing between the pairs of terminals being plated with the conductive metal
material.

- 2 36. The shielded electrical connector assembly of claim 22 wherein the
4 housings of said first and second connectors include complementary interengaging latch
means, with the plating of conductive metal material being continuous onto said latch
means.